

Serial No. 09/428,912  
Amdt. dated July 1, 2004  
Reply to Office Action of April 2, 2004

Docket No. K-007A

### **REMARKS/ARGUMENTS**

Claims 1-4, 7, 10-25, and 27-43 are pending in this application. By this Amendment, claim 37 is amended and claims 8-9 and 26 are cancelled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims, and the drawings. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

#### **Form PTO-Forwarded With Office Action(s)**

The Forms PTO-892 forwarded with the Office Actions dated April 2, 2004 and October 3, 2003 do not reflect Petch et al., U.S. Patent No. 5,781,593 (hereinafter "Petch"). Appropriate correction is respectfully requested.

#### **Allowable Subject Matter**

The Examiner is thanked for the indication that claims 10-13, 17-19, and 35-36 are allowed. Further, it is noted that the Office Action does not indicate a rejection of claims 33-34 over prior art. Accordingly, it is assumed, for purposes of this reply, that claims 33-34 also contain allowable subject matter.

**Rejection(s) Under 35 U.S.C. §103(a)**

The Office Action rejects claims 1-4, 14, and 20-24 under 35 U.S.C. §103(a) as being unpatentable over Choi et al., U.S. Patent No. 5,781,553 (hereinafter "Choi") in view of Nelson et al., U.S. Patent No. 4,597,077 (hereinafter "Nelson"). It appears, based on the Examiner's comments, that it was also the Examiner's intention to reject claim 7 over Choi and Nelson. The rejection is respectfully traversed.

Independent claim 1 recites, *inter alia*, a base station controller and switching system which determines a communication path which selectively provides a voice communication service or a data communication service in response to a call request requested by a calling party, and outputs data and signals which control call connection between the calling party and a called party through the determined communication path. As acknowledged by the Examiner in the remarks regarding independent claim 1, Choi neither discloses nor suggests such features. Further, Nelson fails to overcome the deficiencies of Choi.

More specifically, Nelson discloses an integrated voice/data/control switching system which allows for the dynamic allocation of a network signal stream. Nelson accomplishes this through the use of a network ring with one or more nodes positioned along the ring, and which each connect to one or more local station devices. Data flow through the nodes is controlled in a manner such that speed and capacity is optimized.

An overview of the flow of signal traffic through a node data steering unit 50 is shown in Figure 4 of Nelson. A serial data stream from the network ring enters a receiver and de-multiplexer 53, where the stream is de-multiplexed and communicated along a dedicated network receive highway 62 to a dedicated data steering logic element 41. Each data steering logic element 41 is connected to each of eight node receive highways 66, and eight node transmit highways 68. The data steering logic elements 41 can selectively communicate data from a network receive highway 62 to a node receive highway 66, or from a node transmit highway 68 to a network transmit highway 64. Each data steering logic element 41 can steer data bits independent of the other data steering logic elements 41 (see column 17, line 65 through column 18, line 15 of Nelson) to an appropriate node along a particular ring.

Nelson does not disclose or suggest that the data steering unit 50 can determine a communication path which selectively provides a voice communication service or a data communication service in response to a call request requested by a calling party. Further, Nelson does not disclose or suggest that the data steering unit 50 outputs data and signals which control call connection between the calling party and a called party through the determined communication path. The data steering unit 50 and data steering logic element(s) 41 disclosed by Nelson do not distinguish between a voice and a data transmission. Rather, they are merely capable of providing appropriate routing through the ring to the appropriate node, as well as enhanced transmission sequencing and use of bandwidth to optimize throughput capacity (see

column 18, lines 36-46 of Nelson). Thus, Nelson fails to disclose or suggest the base station controller and switching system as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 is allowable over Choi and Nelson, either alone or in combination, and thus the rejection of independent claim 1 under 35 U.S.C. §103(a) over Choi and Nelson should be withdrawn. Dependent claims 2-4, 7, 14, and 20-24 are allowable at least for the reasons discussed above with respect to independent claim 1, from which they ultimately depend, as well as for their added features.

The Office Action rejects claims 15-16, 25, 27-32, and 37-43 under 35 U.S.C. §103(a) as being unpatentable over Choi in view of Nelson, and further in view of Petch et al., U.S. Patent No. 5,781,593 (hereinafter "Petch"). The rejection is respectfully traversed.

Dependent claims 15-16 and 25 are allowable over Choi and Nelson at least for the reasons discussed above with respect to independent claim 1, from which they ultimately depend, as well as for their added features. Further, Petch is merely cited to teach the use of a selector vocoder controller, a data communication radio link protocol unit, and a vocoder, and thus fails to overcome the deficiencies of Choi and Nelson. Accordingly, it is respectfully submitted that claims 15-16 and 25 are also allowable over the applied combination, and thus the rejection of claims 15-16 and 25 under 35 U.S.C. §103(a) over Choi, Nelson, and Petch should be withdrawn.

Independent claim 27 recites, *inter alia*, a communication network which exchanges data between said first communication device and said second communication device, wherein the first data transfer protocol and the second data transfer protocol are different. Choi neither discloses nor suggests such features.

Choi discloses a digital wireless private branch exchange (PBX) system with a system body 100 which exchanges voice and control data with a terminal device 120 through a base station 300. The base station 300 includes a base station controller 320, channel controllers 330a-330d, an intermediate frequency (IF) processor 340, and a radio frequency (RF) unit 235. A DNIC 323 in the base station controller 320 transmits and receives data in a PCM data format to/from the system body 100 through two B channels and one D channel, and transmits/receives that data to/from ADPCM circuits 324a-324d. Each of the ADPCM circuits 324a-324d performs an adaptive differential pulse code modulation/demodulation operation for the voice data provided to/received from a data processing unit 333 in a corresponding channel controller 330a-330d. A CPU 321 is provided in each of the channel controllers 330a-330d to sequentially store control data, such as system commands and system control parameters, such as handover, for recall when necessary. The CPU 321 in the channel controllers 330a-330d, and the CPU 321 in the base station controller 320 are simply storage devices, and neither CPU is a communication device similar to the terminal device 120.

Thus, although the PBX system disclosed by Choi may be applied as a link between separate/multiple communication devices such as the terminal device 120 disclosed by Choi, Choi does not disclose or suggest that this PBX system could function properly, not be adapted to function properly, in a situation where communication protocols of the respective communication devices are different. Further, Choi does not disclose or suggest that the system body 100, or the base station controller 300 and components thereof, are capable of reconciling any differences in communication protocols.

Accordingly, it is respectfully submitted that independent claim 27 is allowable over Choi. Further, as set forth above, the integrated voice/data/control switching system disclosed by Nelson fails to overcome the deficiencies of Choi. Still further, Petch is merely cited to teach the use of a selector vocoder controller, a data communication radio link protocol unit, and a vocoder, and thus fails to overcome the deficiencies of Choi and Nelson.

Accordingly, it is respectfully submitted that independent claim 27 is allowable over the applied combination, and thus the rejection of independent claim 27 under 35 U.S.C. §103(a) over Choi, Nelson, and Petch should be withdrawn. Rejected dependent claims 28-32, as well as claims 33-34, are allowable at least for the reasons discussed above with respect to independent claim 27, from which they ultimately depend, as well as for their added features.

Independent claim 37 recites, *inter alia*, identifying a type of call and selectively providing a voice communication service or a data communication service in response to the call setting request. As set forth above, Choi neither discloses nor suggests such features.

That is, the PBX switching system disclosed by Choi performs simultaneous transmission and reception of voice data and related control data between a base station 300 and a terminal device 120 for a telephone conversation. However, Choi does not disclose or suggest that this system can discern between and then provide either a voice communication service or a data communication service in response to a call request. Thus, Choi neither discloses nor suggests such features.

Further, as set forth above, the integrated voice/data/control switching system disclosed by Nelson fails to overcome the deficiencies of Choi. Still further, as set forth above, Petch is merely cited to teach the use of a selector vocoder controller, a data communication radio link protocol unit, and a vocoder, and thus fails to overcome the deficiencies of Choi and Nelson.

Accordingly, it is respectfully submitted that independent claim 37 is allowable over the applied combination, and thus the rejection of independent claim 37 under 35 U.S.C. §103(a) over Choi, Nelson, and Petch should be withdrawn. Dependent claims 38-43 are allowable at least for the reasons discussed above with respect to independent claim 37, from which they ultimately depend, as well as for their added features.

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### **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Samuel W. Ntiros**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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